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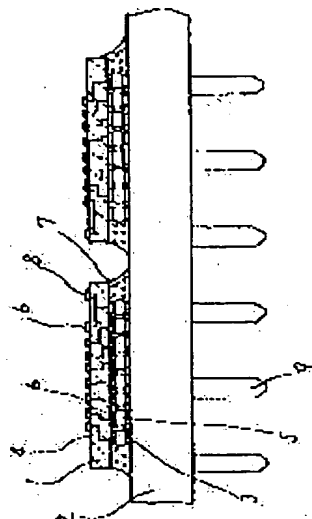
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(54) ORGANIC AND INORGANIC COMPOSITE MULTILAYER BOARD

(57)Abstract:

PURPOSE: To improve the manufacturing yield and facilitate a high speed operation and high density size reduction by a method wherein a ceramic board having a low dielectric constant and a low thermal expansion coefficient is soldered to the chip mounting part of an organic multilayer board and the two boards are unified by filling and bonding with specific resin.

CONSTITUTION: A ceramic board 1 having a low dielectric constant and a low thermal expansion coefficient is soldered to the chip or chip carrier mounting part of a Teflon system organic multilayer board 2. The boards 1 and 2 are unified by filling and bonding with resin having a thermal expansion coefficient between that of solder and that of the board 2. As the thermal expansion coefficient is low in the chip carrier mounting part, excellent repair-resistance and a high density can be realized and a thin film resistance layer can be formed on the surface. Moreover, by selecting the thermal expansion coefficient of the filling resin between that of the solder and that of the board 2, temperature-cycle resistance can be improved. With this constitution, the manufacturing yield can be improved and the high speed processing can be achieved.



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